

KUKHARCHIK, N. [Kucharczyk, N.]; ZHVAKOVA, A. [Zvakova, A.]

Identification of catalytic oxidation products of some pyridine bases by the air in the presence of ammonia. Coll Cz Chem 28 no.1:55-60 Ja '63.

1. Nauchno-issledovatel'skiy institut koksokhimii, Zavody im. Trksa, Ostrava.

KONDRAT'YEV, K.Ya.; STYRO, D.B.; ZHVALEV, V.F.

Radiant influx of heat in the spectral range of $4-40/\mu$ at various levels in the atmosphere. Izv. AN SSSR. Fiz. atm. i okeana 2 no.1:52-63 Ja '66. (MIRA 19:1)

1. Leningradskiy gosudarstvennyy universitet. Submitted July 7, 1965.

MEL'NICHENKO, Ye.L.; BERSHADSKIY, G.Yu.; ZHVALEVSKIY, A.S.

New method for the sealing of glass containers, Koms. i oy.
prom. 18 no.12:18-20 D '63. (MIRA 17:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy
promyshlennosti.

DIRO, P.R.; ZHVALEVSKIY, A.S. [Zhvalevs'kyi, A.S.]

Selecting the optimum pressure of the detergent spray for
washing glass containers. Khar.prom. no.2:81-83 Ap-Je '62.
(MIRA 515:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy
promyshlennosti.

(Canned food—Containers)
(Washing machines)

STANISLAVSKIY, Ye.S.; ZHVANETSKAYA, M.I.

Determining by analytic ultracentrifugation the quantity of
the components in extracts from Leptospira. Zhur. mikrobiol.,
epid. i immun. 33 no.2:126-127 F '62. (MIRA 15:3)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni I.I.
Mechnikova.

(LEPTOSPIRA)

(CENTRIFUGATION)

KISTER, I.G.; ZIVANETSKIY, Ye.F.

Efficient method for producing coal alkali reagent; Neft.
khim. 37 no.2:33-37 F '59. (MIRA 12:4)
(Chemical tests and reagents)

DENISOV, Petr Ivanovich; ZHVANETSKIY, Yefim Fedorovich; DUBROVINA,
H.D., ved. red.; POLOSINA, A.S., tekhn. red.

[Preparing and using dry mud in drilling] Proizvodstvo i
primeneniye glinoporoshkov v burenii. Moskva, Izd-vo
"Nedra," 1964. 109 p. (MIRA 17:3)

ZHVANETSKIY, Ye.F., red.; KANTAKUZEN, A.V., red.; DUBROVINA, N.D.,
ved. red.

[Well cementing and water exclusion; data compiled at the All-Union Scientific and Technical Institute for Drilling Technology in October of 1962 at a seminar on the formation of cement stone] Kreplenie skvazhin i razobshchenie plastov; materialy sostoiavshegosia vo VNIIBT v oktiabre 1962 g. seminaru po formirovaniu tsementnogo kamnia. Moskva, Izd-vo "Nedra," 1964. 157 p. (MIRA 17:6)

1. Seminar po formirovaniyu tsementnogo kamnia, 1962.

ZHVANETSKIY, Ye.F., red.; FILATOV, B.S., red.; ISAYEVA, V.V., red.
red.; VORONOVA, V.V., tekhn. red.

[Fluids for drilling wells; transactions of the inter-
republic conference in Baku] Promyvochnye rastvory dlia
bureniia skvazhin; trudy mezhrespublikanskogo soveshchaniia
v Baku. Moskva, Gostoptekhizdat, 1962. 291 p.

(MIRA 15:9)

(Oil well drilling fluids)

ZHVANETSKIY-ZABOLOTHNY, A.D.

[Tissue therapy by Filator's method in cancerous ulcers of the skin]
Tkanevaia terapiia po metodu V.P. Filatova pri rakovykh iasvakh koshi.
Khirurgia, Moskva no.3:74-78 Mr '50. (GLML 19:1)

1. Of the Clinic for General Surgery (Head S.A.Bakkal) of Odessa Medical Institute.

ZHVANIYA, A.P.

Changes in coagulating and anticoagulating systems of the blood
before and after prostatectomy. Soob. AN Gruz. SSR 38 no. 3:
715-722 Je '65. (MIRA 18:12)

1. Institut urologii, Tbilisi. Submitted Sept. 25, 1964.

ANTONOVA, R.A.; BARKHUDAROV, E.M.; ZHVANIYA, B.P.; ROSTOMASNVILI, G.I.;
TSINTSADZE, N.L.

Interaction of shock waves. Zhur. tekhn. fiz. 33 no.9:1137-
1138 S '63. (MIRA 16:11)

ZHVANIYA, Dmitriy Georgiyevich; SOLOMATINA, Z.D., red. izd-vo; IYERUSALIMSKAYA,
I.S., tekhn. red.

[Plates of color designations for geological maps of various scales;
geological legend] Tablitsy tsvetnykh oboznachenii dlia geologi-
cheskikh kart raznykh masshtabov (geologicheskaya legenda). Moskva,
(os. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1960. 5 p.
18 plates.

(MIRA 14:4)

(Geology--Maps)

ZHVANIYA, G.A.; RUSADZE, U.S.; KHETSURIANI, D.S.

Early detection and functional treatment of dysplasia of the
hip joint in year-old children. Soob. AN Gruz. SSR 40 no.2:
487-492 N '65.
(MIRA 19:1)

1. 1-ya Detskaya bol'nitsa, Tbilisi. Submitted March 15, 1965.

ZHVANIYA, G. P. , Cand Med Sci -- (diss) "On the problem of the
stimulation of ^{labor activity} ~~the delivery process~~." Tbilisi, 1958. 17 pp (Tbilisi
State Med Inst). 200 copies
(KL, 12-58, 102)

-86-

ACC NR: AT7000182

SOURCE CODE: UR/3182/65/002/000/0040/0045

AUTHOR: Davitashvili, T. Sh.; Zhvaniya, M. P.

ORG: none

TITLE: Thermoluminescence and optical absorption spectra of irradiated LiF crystals

SOURCE: AN Gru:SSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 2, 1965, 40-45

TOPIC TAGS: neutron irradiation, irradiation effect, gamma irradiation, crystal absorption, crystal lattice dislocation, *thermoluminescence, absorption spectrum*

ABSTRACT: An investigation was made of the generation of dislocations in alkali halide crystals irradiated in an atomic reactor. Specimens $10 \times 0.8 \times 0.5$ cm taken from a single crystalline ingot were annealed at 700K (one week), cooled slowly (two days) to room temperature, split into smaller $1.5 \times 0.8 \times 0.5$ m specimens, and separated into three groups. The first group was irradiated in the active zone of a nuclear reactor at a normal temperature (310K, with a thermal neutron intensity of 1.1×10^{12} n/cm².sec), the second was irradiated at low temperature (155K, with a thermal neutron intensity of 0.55×10^{12} n/cm².sec), and the third was irradiated in a radiative gamma-loop at room temperature (dose rate 8×10^5 r/hr). With an increase in neutron flux or in gamma-ray dose, the intensity of the low-temperature peaks decreased, dropping to zero, and a new peak (or peaks) formed in the higher-temperature

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ACC NR: AT7000132

region. A displacement of peaks to the high-temperature side and a suppression of low-temperature peaks occurred. These changes were less noticeable in LiF crystals irradiated in the gamma-loop, and were not observed at all in KCl crystals irradiated in the reactor. It is concluded that the changes are the result of a specific neutron effect on LiF crystals: the amplification of the generation of radiative damages of the crystal lattice caused by the products resulting from nuclear reaction on the Li^6 isotope (high-energy alpha particles appearing in the crystal lattice itself) as the result of the capture of thermal neutrons. Orig. art. has: 5 figures. [JA]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 5109

Card 2/2

ZHVANIYA, T.O.; GACHECHILADZE, M.G.; DZHAPARIDZE, T.N.

Importance of the determination of the thyroid gland function
by the method of radioactive indicators in a surgical clinic.
Trudy Inst.eksp.i klin.khir.i gemat AN Gruz.SSR 10:237-245 '62.

(THYROID GLAND)

(IODINE ISOTOPES)

(MIRA 16:2)

ZHVANIYA, T.O., zaal. deyatel' nauk, prof.; SEMENSKAYA, Ye.M., red.;
YANKOSHVILI, TS.A., red. izd-va; BOKERIA, E.B., tekhn. red.

[Blood transfusion reactions and complications caused by the
transfusion of bacterially contaminated blood, their prevention
and treatment] Gemotransfuzionnyye reaktsii i oslozheniya, vyz-
vannye perelivaniem bakterial'no-zagryaznennoi krovi, ikh profi-
laktika i lechenie. Tbilisi, Izd-vo Akad. nauk Gruzinskoi SSR,
1961. 87 p.
(MIRA 15:12)

1. Institut eksperimental'noy i klinicheskoy khirurgii i gema-
tologii Akademii nauk Gruzinskoy SSR (for Zhvaniya).
(BLOOD—TRANSFUSION)

YERISTAVI, K.D.; ZHVANIYA, T.O.; KIBADZE, N.N.

Radioactive iodine in the therapy of thyrotoxicoses. Probl. endkok.
1 gorm. 6 no. 1:102-106 Ja-F '60. (MIRA 14:1)
(HYPERTHYROIDISM) (IODINE—ISOTOPES)

ERISTAVI, K.D.; ZHVANIYA, T.O.; ODISHVILI, G.Ya. (Tbilisi)

Effect of hibernation and hypothermia on the course of hemotransfusion
shock in an experiment. Pat. fiziol. i eksp. terap. 5 no.6:30-33
M-D '61. (MIRA 15:4)

1. Iz Instituta eksperimental'noy i klinicheskoy khirurgii i
ematologii (dir. - prof. K.D.Eristavi) AN Gruzinskoy SSR.
(SHOCK) (BLOOD—TRANSFUSION) (ARTIFICIAL HIBERNATION)
(HYPOTHERMIA)

ZERVANIYA, Ye.I., Cand Med Sci -- (diss) "On the problem
of studying the clinic of nephritis and changes in certain
biochemical ^{indices} ~~indicators~~ in children." Tbilisi, 1959, 18 pp
(Tbilisi State Med Inst) 200 copies (KL, 34-59, 117)

KHOMYAKOV, K. G., KHOLLER, V. A., ZHVANKO, S. A.

Cadmium

Actual heat capacity of tin and cadmium near the melting point. Vest. Mosk. un., 7, No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October, 1952, ~~1953~~. Unclassified.

33732

S/656/61/000/000/002/007
D244/D304

21.2100

AUTHORS: Khomyakov, K.G., Spitsyn, V.I., and Zhvanko, S.A.

TITLE: True heat capacity of U_3O_8 SOURCE: Spitsyn, V.I., ed. Issledovaniya v oblasti khimii
urana; sbornik statey (Moscow) 1961, 141 - 144

TEXT: The authors measured true heat capacities of U_3O_8 up to $1000^{\circ}C$. A method depending on the constant heat flow at a given temperature was used. Accuracy of the determinations was 1 - 2 % up to $600^{\circ}C$ and 2 - 3 % up to $1000^{\circ}C$. U_3O_8 was prepared by heating chemically pure ammonium uranate at $\sim 800^{\circ}C$. Before a sample was placed in the calorimeter it was heated slowly to $600^{\circ}C$ and then slowly cooled to eliminate strains. It was found that U_3O_8 undergoes two phase changes, one at $770^{\circ}C$ and the other at $940^{\circ}C$. Thus U_3O_8 can exist in the form of 3 phases: α , stable up to $770^{\circ}C$, β ($770^{\circ} - 940^{\circ}C$) and γ (above $940^{\circ}C$). The heat capacities are given in the table. The heats of the phase changes observed were calculated from the measured heat capacities by comparing areas (I) enclosed

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True heat capacity of U_3O_8

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D244/D304

sed by the experimental curve of true heat capacity, temperature axis and two ordinates at the beginning and the end of a transformation and (II) another area calculated from area I bounded by the same ordinates, temperature axis and a heat capacity curve that would exist in the absence of the phase change. The heats were 265 ± 5 cal/mole for the $\alpha \rightarrow \beta$ transformation and 1105 ± 15 cal/mole for the $\beta \rightarrow \gamma$ transformation. Secondary heat effects were also observed to take place before the first and the second phase changes (25 and 65 cal/mole respectively) which were due to transformations of the supercooled phases. There are 1 figure, 1 table and 7 references: 1 Soviet-bloc and 6 non-Soviet-bloc. The 4 references to the English-language publications read as follows: J. Dewar, Proc. Roy. Soc., 89A, 158, 1913; G.E. Moore and K.K. Kelly, J. Amer. Chem. Soc. 69, 2105, 1947; A. Southard, ibid., 63, 3142, 1942; C.S. Smith Met. techn., 6, 6, 1939.

Card 2/2

KHOMYAKOV, K. G. : KHOLLER, V. A.: ZHVANKO, S. A.

Tin

Actual heat capacity of tin and cadmium near the melting point. Vest. Mosk. un 7
No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October, 1952-~~1953~~ 1950. Unclassified.

SOV/76-32-9-39/46

AUTHORS: Shamovskiy, L. M., Rodionova, L. M., Sidorenko, G. A.,
Zhvanko, Ya. N.

TITLE: On the Polyhedral Substructure of the Single-Crystals of Alkali-Halide Phosphorus (K voprosu o poliedricheskoy substrukture monokristallov shchelочно-galoidnykh fosforov)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9, pp 2205-2207 (USSR)

ABSTRACT: Monocrystals of alkali-halide phosphorus are prepared by growing them in a solution to which an activator has been added. They have a polyhedron substructure. This results from the two-fold behavior of the activator: one part enters as a solid solution while the other part, usually smaller, forms inner contact surfaces. The substructure shows itself by a cleavage in the interference spots of the Laue exposures, especially after careful annealing. This effect cannot be confused with the doubling of the diffraction patterns which arise through the light penetration of thicker plates. From the publication of the authors (Ref 3) 8 Laue pictures are reproduced. The present article criticizes V. F. Pisarenko (Ref 12), who

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On the Polyhedral Substructure of the Single-Crystals of Alkali-Halide Phosphorus

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checked part of the papers of the authors. He did not distinguish between cleavage and doubling in the interference spots. Two printing errors in the earlier paper (Ref 3) are corrected here. There are 8 figures and 15 references, 8 of which are Soviet.

Card 2,2

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3"

51-5-8/26

AUTHORS: Shumovskiy, I.M., Dunina, A.A. and Zhvanko, Yu.N.

TITLE: The Structure of the Alkali Halide Phosphors and the Mechanism of the Processes of their Luminescence.
(Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.2, Nr 5, pp.599-605
(USSR)

ABSTRACT: The authors study the interaction of electrons and holes with the activator in phosphors. Their results can be given by the band model proposed by Lambe and Klick (14). The latter two authors report luminescence as recombination of holes with electrons localised on the activator in the process of excitation of the phosphor. The authors of this paper supplement this model by limiting the possibility of such recombination to the activator which is situated on contact surfaces. The effect of the activator on the electrical conductivity was studied in crystals of KI and KI-Tl grown in vacuum. These samples were placed between platinum electrodes and heated in electrical furnaces. Their electrical conductivity was measured at 1000 o/s. Dependence

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The Structure of the Alkali Halide Phosphors and the Mechanism of
the Processes of their Luminescence.

of the electrical conductivity on temperature is given in Fig.2. For pure KI (curve 1) the values in Fig.2 agree with those given in Ref.23. Straight line 2 in Fig.2 is an extrapolation of the intrinsic conductivity of pure KI to low temperatures. Curves 3, 4 and 5 give the conductivity of the KI-Tl phosphor with 0.01% by weight of Tl, 0.1% Tl and 10% Tl respectively. The results indicate that small amounts of Tl in KI decrease the structure-sensitive conductivity of the crystals. These effects are equivalent to strong cooling of KI. The luminescence of the pure crystals and of the phosphors is similar in nature. In both cases the contact surfaces are the places of localisation of electrons and holes which then recombine to emit radiation. The activator changes the properties of the contact surfaces by forming deeper levels of electron localisation. This changes the emission spectrum of the crystal. Small additions of the activator do not materially affect the intrinsic conductivity of the crystals. At high activator concentrations the structure-sensitive conductivity increases. Simultaneously ultraviolet luminescence yield decreases and emission in the visible spectrum becomes

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>HVANKO, YU.N.

51-6-23/26

AUTHORS: Zhvanko, Yu. N., Morgenshtern, Z. L. and Shamovskiy, L. M.

TITLE: Study of the properties of phosphors KI-In and KI-Ga. (Issledovaniye svoystv fosforov KI-In i KI-Ga.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.II, Nr.6, pp. 821-823. (USSR)

ABSTRACT: This paper deals with properties of KI phosphors activated with analogues of Tl. Single crystals of KI activated with various amounts of Tl, In and Ga were prepared. All samples were prepared under the same conditions in sealed quartz ampoules by the method described in Ref.3. Activators were introduced in metallic form. To avoid oxidation the crystals were prepared in an atmosphere of hydrogen. When excited with a mercury lamp KI-In emits yellow-green and KI-Ga orange light. The luminescence spectra of KI-Tl, KI-In and KI-Ga are shown in Fig.1. The absorption spectra of the three phosphors are shown in Fig.2.

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2 HVH HKC, 14-12.

AUTHORS: Shamovskiy, L. M. and Zhvanko, Yu. N.

51-3-10/14

TITLE: Electron-acceptor Levels in Alkali Halide Crystalline Phosphors, which are due to the Activator.
(Elektronno-aktseptornyye urovni v shchelochnogaloidnykh kristallofosforakh, svyazannyye s aktivatorom.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.3, pp.267-271.
(USSR)

ABSTRACT: Interaction of the activator in alkali halide phosphors with electrons and holes, which were introduced into the crystal by additive coloring, was studied. This was done by measuring absorption spectra of a KI-Tl crystal after additive coloring in iodine vapours. This coloring process introduces holes and removes an equivalent amount of cations. On subsequent cooling of the crystal some of these holes associate with vacant cation sites and form V-centres. The absorption spectrum of KI-Tl is shown in Fig.1 curve 1. The additional band due to V-centres in KI produced by coloring at 540°C is shown in Fig.1 curve 2. No changes occur in the activator bands and the crystal does not lose its power to luminesce. It is concluded

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Electron-acceptor Levels in Alkali Halide Crystalline Phosphors, 51-3-10/14
which are due to the Activator.

that holes are not localized by the activator and do not cause transitions of the latter into excited or ionised states. Studies of interaction of electrons at the activator were made for KI-Tl and KI-In phosphors. The absorption spectrum of the latter is shown in Fig.2, curve 1. The activator bands of curve 1 disappear on additive coloring of KI-In in potassium vapours (Fig.2, curve 2). The absorption spectra of colored phosphors NaCl-Hg and KCl-Ag are shown in Fig.3. It was found that the activator was raised to the atomic state by capturing electrons at contact surfaces of polyhedral substructure. The activator band disappears then completely and the crystal loses its ability to luminesce. Additional bands characteristic of the activator atoms and their colloidal aggregates appear in the spectrum. Holes do not interact with the activator and ionised centres of emission are not formed. The results are best represented by a band model proposed by Lambe and Klick (Ref.13) for ZnS phosphors. The latter two authors

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Electron-acceptor Levels in Alkali Halide Crystalline Phosphors,
which are due to the Activator. 61-3-10/14

Regard luminescence as a recombination of a hole with an electron localised at the activator. The present authors add a limitation that electrons can be localised only at contact surfaces. There are 3 figures and 13 references, 9 of which are Slavic.

ASSOCIATION: All-Union Institute of Mineral Raw Materials.
(Vsesoyuznyy institut mineral'nogo syr'ya.)

SUBMITTED: January 31, 1957,

AVAILABLE: Library of Congress

Card 5/5

Zhvanko, Yu.N.

SUBJECT: USSR/Luminescence

48-4-34/48

AUTHORS: Shamovskiy L.M. and Zhvanko Yu.N.

TITLE: Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #4, pp 557-569 (USSR)

ABSTRACT: A number of experimental facts can be interpreted under assumption that crystallophosphors possess microheterogeneous structure due to a double distribution of activators.

In order to check this hypothesis, experiments were performed with KJ activated by thallium and indium. The following results were obtained:

1. Absorption and luminescence spectra of KJ-Tl and KJ-In phosphors do not depend on the type of compounds used for the growth of single crystals, when the activator is present at low concentrations;

2. At the equal (general) activator content, intensities of its bands in the absorption spectrum of crystallophosphors differ sharply from one another.

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TITLE:

Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory) 48-4-34/48

3. The most soluble compounds of the activator (which form solid substitution solutions with the basic substance of the phosphor) give rise to less intensive bands of additional absorption at equal concentrations.

4. The intensity of activator bands in the phosphor absorption spectrum rises proportionally to the concentration of introduced impurities within certain limits.

In order to investigate the problem, in which of the two states of the activator it forms electron-acceptor levels, single crystals of KCl and NaCl were synthesized with an addition of various quantities of AgCl as an activator.

The dependence of absorption coefficient on the activator concentration is shown in Figure 3 in the article. The result confirms the conclusion on double distribution of the activator, and moreover, indicates that atomic centers arise only on the contact surfaces. It means that the activator creates electron-acceptor levels only on the boundaries of units of the micro-heterogeneous structure.

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TITLE:

Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory) 48-4-34/48

A new phosphor was produced: single crystals of NaBr activated with InSe. When this phosphor is excited by light, a distinctly expressed photoconductivity is discovered in the activator bands. Photo-current carriers proved to be electrons.

Experimental materials obtained permit to conclude that activating impurities used in the growth of phosphors lead to polyedric structure of crystals. The mosaic structure of alkali-haloid phosphors is their fundamental property. The spectrum of additional absorption is determined by the activator located on intercrystalline surfaces. Deep localization levels of electrons arise on these contact surfaces. Their recombination with holes gives rise to liberation of energy in the form of radiation. The luminescence spectrum is determined by the difference in energies of localized holes and electrons in contact surfaces. Therefore, alkali-haloid phosphors are surface-activated crystals.

The article contains 6 graphs.

The bibliography lists 30 references, of which 14 are Slavic.

Card 3/4

TITLE: Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory) 48-4-34/48

INSTITUTION: All-Union Institute of Mineral Raw Materials

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress

Card 4/4

ZHVANKO Yu. N.

SUBJECT: USSR/Luminescence

48-5-18/56

AUTHORS: Shamovskiy L.M., Dunina A.A. and Zhvanko Yu.N.

TITLE: Structure of Alkali-Haloid Phosphors and Mechanism of Luminescence processes (Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, pp 675-677 (USSR)

ABSTRACT: Investigations carried out have shown that:

1. In the presence of holes (and V-centers) the position, shape and intensity of activator bands in alkali-haloid phosphors remains unchanged;
2. On the contrary, the activator localizes electrons. At that, additional absorption bands completely disappear, and at the same time the crystal loses its ability to be luminescent. It was established that the centers of electron localization are in the contact surfaces of polyhedral structure of phosphors.
3. Ions of an activator in the lattice nodes are neither donors nor acceptors of electrons and therefore, take no immediate part in the phenomena of luminescence.

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48-5-18/56

TITLE: Structure of Alkali-Haloid Phosphors and Mechanism of Luminescence processes (Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminesentsii)

4. A new energy model of alkali-haloid phosphors is proposed which takes into account their microheterogeneous structure.

5. A connection between photochemical and luminescent properties of crystals has been established.

6. A dependence of electroconductivity of KJ and KJ(Tl) on temperature and composition has been investigated. It was shown that the maximum in the luminescence spectrum of pure NaJ (band at 303 mμ) corresponds to the energy of interaction of localized electrons and holes in the contact surface.

The report was followed by a discussion.
One Russian reference is cited.

INSTITUTION: All-Union Scientific Research Institute of Mineral Raw Materials.

PRESENTED BY:

SUBMITTED: No date indicated;

AVAILABLE: At the Library of Congress.
Card 2/2

SUBJECT: USSR/Luminescence

48-5-44/56

AUTHORS: Zhvanko Yu.N., Morgenshtern Z.L. and Shamovskiy L.M.

TITLE: Investigation of the Properties of KJ-In and KJ-Ga Phosphors
(Issledovaniye svoystv fosforov KJ-In i KJ-Ga)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957,
Vol 21, #5, p 752 (USSR)

ABSTRACT: Phosphors based on potassium iodide and activated by In and Ga were produced and investigated.

The KJ-In crystals show yellow-green luminescence ($\lambda_{\max} \sim 50 \text{ m}\mu$) and KJ-Ga crystals show orange luminescence ($\lambda_{\max} \sim 600 \text{ m}\mu$) at photoexcitation.

The introduction of In or Ga, as well as Tl, leads to the arising of characteristic activator bands on the long wavelength edge of the internal absorption of a basic substance. In the KJ-In phosphor are observed bands with $\lambda_{\max} \sim 230 \text{ m}\mu$ and $262 \text{ m}\mu$ and one weak band with $\lambda_{\max} \sim 310 \text{ m}\mu$. In the absorption spectrum of KJ-Ga two intensive bands with $\lambda_{\max} \sim 230 \text{ m}\mu$.

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TITLE:

48-5-44/56
Investigation of the Properties of KJ-In and KJ-Ga Phosphors
(Issledovaniye svoystv fosforov KJ-In i KJ-Ga)

and 248 to 249 $m\mu$ were discovered.

The quantum yield of KJ-In luminescence was found to be 0.97
and that of KJ-Ga was found to be 0.65 at the excitation by
 $\lambda = 265 m\mu$.

Two Russian references are cited.

INSTITUTION: Physical Institute im. Lebedev of the USSR Academy of Sciences
and All-Union Scientific Research Institute of Mineral Raw
Materials.

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress

Card 2/2

MAKOKLIN, I.A.; VERNIDUB, I.I.; ZHYVANKO, Yu.N.; KARPOV, V.T.;
RAZUMOVSKAYA, G.S.; VOL'KHOVSKAYA, A.A.

Kinetics of the oxidation of fine magnesium powders at high
temperatures. Zhur.prikl.khim. 33 no.4:824-831 Ap '60.
(MIRA 13:9)

1. Monkovskiy ordena Trudovogo Krasnogo Znameni institut
narodnogo khozyaystva imeni G.V.Plekhanova.
(Magnesium) (Powder metallurgy) (Oxidation)

5.2100B

80101

S/080/60/033/04/12/045

AUTHORS: Makolkin, I.A., Vernidub, I.I., Zhvanko, Yu.N., Karpov, V.T., Razumovskaya, G.S., Vol'khovskaya, A.A.

TITLE: The Kinetics of Oxidation of Fine Magnesium Powders at Raised Temperatures

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 4, pp 824 - 831

TEXT: This is a continuation of the work in [Ref 11]. The kinetics of the oxidation of fine magnesium powders of the M-3⁰ and M-4⁰ type in an atmosphere of air, oxygen and nitrogen is investigated here. The oxidation was carried out in porcelain crucibles and drip pans which were placed into muffle furnaces. After heating the samples were subjected to roentgen-structural analysis. The temperature range for powders in an air atmosphere was 350 - 500°C, in oxygen 350 - 450°C and in nitrogen 400 - 500°C. It has been established that at temperatures of up to 450°C both powders interact with air, oxygen and nitrogen, the reactions being described by damping curves. This points to the fact that a film of magnesium oxides and nitrides has protective properties up to 450°C. Above this temperature the film loses its protective properties. M-4 powder is more reactive than M-3 powder, which is explained by the large specific surface of M-4 (3,500 cm²/g) compared to that of M-3 (616 cm²/g). This conclusion agrees with the values of the activation energies: these values for M-4 in air and

Card 1/2

80101

S/080/60/033/04/12/045

The Kinetics of Oxidation of Fine Magnesium Powders at Raised Temperatures

nitrogen are lower and in oxygen higher than for M-3. It has been established that in the case of heating powders at 500°C in the air MgO and Mg_3N_2 are formed simultaneously. In this case a white, a gray and a yellow layer are formed in the reaction products. The first layer consists mainly of MgO and partly of Mg_3N_2 , in the second and third layers more Mg_3N_2 and less MgO is contained, as well as an insignificant amount of $Mg(OH)_2$. The reaction product of both powders in nitrogen is Mg_3N_2 . Thanks are expressed to Ye.S. Makarov from the Institut analiticheskoy khimii AN SSSR (Institute of Analytical Chemistry of the AS USSR).

There are: 5 graphs, 5 tables and 11 references, 2 of which are Soviet, 4 English 1 American, 1 Rumanian, 1 French, 1 German and 1 Japanese.

ASSOCIATION: Moskovskiy ordena Trudovogo Krasnogo Znameni institut narodnogo khoz-yaystva imeni G.V. Plekhanova (Moscow Institute of National Economy imeni G.V. Plekhanov, Bearer of the Order of Labor Red Banner).

SUBMITTED: July 2, 1959

Card 2/2

Zhvanko, Yu. N.

USSR/Physics - X-ray analysis

Card 1/1 Pub. 22 - 13/40

Authors : Shamovskiy, L. M.; Rodionova, L. M.; Sidorenko, G. A.; and Zhvanko, Yu. N.

Title : X-ray investigation of monocrystal phosphori, NaCl & KCl, activated with silver chloride

Periodical : Dok. AN SSSR 99/2, 235-238, Nov 11, 1954

Abstract : Experiments were performed for the purpose of studying the nature of monocrystalline phosphori [NaCl, KCl, NaCl(Ag⁺) and KCl(Ag⁺)]. The experiments were conducted with the help of a special X-ray apparatus. Laue-grams were obtained and studied. The results and conclusions are presented. Eight references; 1-USSR (1923-1954). Illustrations.

Institution : The All-Union Scientific Research Institute for Raw Materials

Presented by: Academician N. V. Belov, June 24, 1954

STANISLAVSKIY, E.S., ZHVANETSKAYA, M.I.

"The antigenic properties of the cellular structure in *Escherichia coli*."

Report submitted to the Intl. Congress for Microbiology
Montreal, Canada 19-25 Aug 1962

ZHVANKO, YU. N.

Name : ZHVANKO, YU. N.
Dissertation : Study of certain properties of alkaline
halide phosphors activated by thallium
and indium
Degree : Cand Tech Sci
Defended At : All-Union Inst of Mineral Resources, Min
Geology and Conservation of Natural
Resources of the USSR
Publication Date, Place : 1956, Moscow
Source : Knizhnaya Letopis' No 6, 1957

ZHVANKO, Yu.N.; MORGENSHTERN, Z.L.; SHAMOVSKIY, L.M.

Investigation of the properties of KI-In and KI-Ga phosphors.
Opt. i spektr. 2 no.6:821-823 Je '57. (MLRA 10:9)

1. Fizicheskiy institut imeni P.N. Lebedeva Akademii nauk SSSR,
Vsesoyuznyy institut mineral'nogo syr'ya.
(Phosphors--Spectra)

ZHVANKO, Y. N.

SHAMOVSKIY, L. M.; ZHVANKO, Y. N.

Electron-acceptor levels connected with activators in alkali-halide
crystalline phosphors. Opt. i spektr. 3 no. 3: 267-271 S '57.

(MLRA 10:9)

1. Vsesoyuznyy institut mineral'nogo syr'ya.
(Phosphors)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3"

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CIA-RDP86-00513R002065110003-3

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3"

SOV/133-58-6-33/33

AUTHOR: Zhvetin, N.P., Candidate of Technical Sciences

TITLE: In the "Serp i Molot" Plant (Na zavode "Serp i Molot")

PERIODICAL: Stal', 1958, Nr 6, p 575 (USSR).

ABSTRACT: A decrease in the consumption of metal for shrinkage head of shaped castings by using heating exothermic briquettes. Briquettes made from the following mixture were successfully used for heating shrinkage head of castings from 100 to 2 000 kg. The mix: ground coke 50%; ground charcoal 25%; sawdust (dry) 15%, ground refractory clay 5% and sodium nitrate 5%.

Card 1/1 1. Metals--Casting

ZHVIDKOVSKIY, E. G.

USSR/Aluminum Ingots
Copper Ingots

Feb 47

"The Theory of a Continuous Ingot," A. N. Tikhonov, E. G. Zhvidkovskiy, 16 pp

"Zhur Tekh Fiz" Vol XVII, No 2

Statement of the problem in the form of a partial differential equation relating u (temperature) to t (time) and x (distance). Approximate solution. Practical statement of the problem in the case of aluminum and copper bars, plates and cylinders. Calculation of crystallization.

PA11T24

UDYANSKIY, N.Ya., redaktor; ZHYANETSKIY, Ye.F., redaktor; KOVALEVA, A.A.,
vedushchiy redaktor; ERDENKO, V.S., tekhnicheskiy redaktor

[Improving the quality of well cementing; papers of the All-Union
Technical Conference] Povyshenie kachestva tsementirovaniya skvazhin:
materialy Vsesoiuznogo tekhnicheskogo soveshchaniya. Moskva, Gos.
nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1956. 93 p.
(MLRA 9:11)

1. Russia (1923- U.S.S.R.) Ministerstvo neftyanoy promyshlennosti.
Nauchno-tekhnicheskiy sovet.
(Oil well cementing)

ZHVANSKIY, V.A.; KURLYAND, V.P.

[Forage beans] Kormovye boby. [n.p.] Smolenskoe knizhnoe
izd-vo, [n.d.], 27 p. (MIRA 17:7)

NEDOREMOV, V.Yu.; ZHVIK, I.M.

Using the method of photolattice for experimental investigation
of the nature of deformations caused by blanking and piercing
of plate materials. Trudy LPI no.250:107-110 '65. (MIRA 18:9)

KOCHETKOV, N.K.; SOKOLOV, S.F.; ZHVIRBLIS, V.Ye.

Oxymethylation of 3, 5-dimethyloxazole. Zhur.VKHO 6 no.4:466-467
'61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Oxazole)

SHEYMAN, B.M.; KOST, A.N.; DENISOVA, L.Ya.; ZHVIRBLIS, V.Ye.

Synthesis of amides and hydrazides of β -(2-methoxy(hydroxy)-3-alkylphenyl)propionic acids. Vest. Mosk. un. Ser. 2: Khim. 20 no.1:42-45 Ja-F '65. (MIRA 18:3)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.

ZHVIRBLIS, V. YE., OVODOV, YU. S., KOVHETKOV, N. K., KHORLIN, A. YA.,
VASKOVSKIY, V. YE. (USSR)

"Investigations of Triterpene Saponins."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961

KOCHETKOV, N.K.; KHORLIN, A.Ya.; VAS'KOVSKIY, V.Ye.; ZHVIRBLIS, V.Ye.

Triterpenic saponins. Part 1: Saponins from Manchurian aralia.
Zhur. ob. khim. 31 no.2:658-665 F '61. (MIRA 14:2)

1. Institut khimii prirodnikh soedineniy AN SSSR.
(Saponins)

BOYKO, M.S. (Grodenskaya oblast'); ANIS'KO, Ye.". (Grodenskaya oblast');
ZHVIRBLYA, M.A. (Grodenskaya oblast')

Effect of the microclimate of swine houses on the organism of
animals. Veterinariia 42 no.10:80-82 O '65.

(MIRA 18:10)

ZHVIRBLYANSKAYA, A.Yu.; ISAYEVA, V.S.

Effect of biomycin and terramycin on *Achromobacter* genus bacteria.
Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom. no.11:3-16
'63. (MIRA 17:9)

ZHVIRBLYANSKAYA, A.Yu.

Selecting the new brewery yeast strains for continuous
fermentation. Form. i spirt.prom. 30 no.4:22-24 '64.
(MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut
pivobezalkogol'noy i vinodel'cheskoy promyshlennosti.

~~ZHYBILYANSKAYA, Adelgarda Yul'yayna~~; ZUBENKO, A.P., inzh., spetsred.;
BELIKOVA, I.S., red.; TARASOVA, N.M., tekhn.red.

[Microbiological control in brewing] Mikrobiologicheskii kontrol'
pivovarennoy proizvodstva. Moskva, Pishchepromizdat, 1959.
55 p.

(BREWING)

(MICROBIOLOGY)

(MIRA 12:12)

DENSICHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.

Conditions of the formation of diacetyl, acetoin and 2,3 butyleneglycol during fermentation. Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom. no.9:5-12 '62.

Use of the iodometric method for determining aldehydes. 12-14

Some observations concerning the formation of aldehydes under the conditions of continuous fermentation. 14-18

The likeliest sources of the formation of fusel oils under the conditions of alcohol fermentation. 18-22

Some characteristics of yeast cell multiplication under the conditions of continuous fermentation. 22-32

Studying the flocculation capacity of yeast under the conditions of continuous fermentation. 32-39 (MIRA 16:10)

ZHVIRIYANSKAYA, A.Yu.

Effect of the conditions of yeast storage on its fermentive
activity. Trudy TSentr. nauch.-issl. inst. piv., bezalk. i
vin. prom. no.10:132-154 '63. (MIRA 17:8)

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.

Disinfection under the conditions of the continuous brewing method.
Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom.no.11:77-79
'63.

(MIRA 17:9)

ZHVIRMLYANSKAYA, A.Yu.

Study of the metabolism of some bacteria injurious to brewing.
Mikrobiologiya 32 no.3: 541-550 My-Je'63 (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy
promyshlennosti.

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBYANSKAYA, A.Yu.

Study of carbohydrate metabolism in bottom-fermenting brewer's yeast
under conditions of continuous flow brewing. Mikrobiologiya 30 no.6:
990-994 N-D '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy
promyshlennosti, Moskva.

(YEAST)

(CARBON METABOLISM)

(BREWING)

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.

Formation of diacetyl and acetoin during the fermentation of
brewers' wort. Mikrobiologiya 31 no.1:140-145 Ja-F '62.

(MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy
promyshlennosti, Moskva.

(BUTANEDIONE) (BUTANONE) (BREWING)

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.; MOISEYEVA, V.P.;
REBENTSVEYG, I.A.; BOBIKOV, Ye.V.

Role of diacetyl on the vitality of sedimentary brewers' yeasts.
Trudy TSentr.nauch.-issl.inst.piv., bezalk.i vin.prom.no.11:16-27 '63.
(MIRA 17:9)

ZHVIRNLYANSKIY, V.Yu.; BANKOV, D.M.

The BM-2KM electric vacuum furnace for pulling single crystals.
Biul.tekh.-ekon.inform. no.9:6-7 '61. (MIRA 14:9)
(Electric furnaces)

ZHVIRBL'ANSKI, J.

A column for technicians. II. p. 267

CUKORIPAR. (Mezőgazdasági és Élelmiszeripari Tudományos Egyesület.
Cukoripari Szakosztály.) Budapest, Hungary, Vol. 11, No. 10, Oct. 1958.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 7, July 1959.
Uncla.

ZHVIRBLIANSKII, J.

Influence of various factors on losses of sugar content in making molasses.
Tr. from the Russian. p. 263.

CUKORIPAR. (Mezőgazdasági és Élelmiszeripari Tudományos Egyesület.
Cukoripari Szakosztály) Budapest, Hungary, Vol. 11, No. 10, Oct. 1958.

Monthly List of East European Accessions (EEAT) LC, Vol. 8, No. 7, July 1959.
Uncla.

KOCHETKOV, N.K.; SOKOLOV, S.D.; ZHVIRBLIS, V.Ye.

Isoxazole series. Part 11: Condensation of isoxazoles with aromatic aldehydes. Zhur. ob. khim. 30 no.11:3675-3682 N°60.
(MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet.
(Isoxazole) (Aldehydes)

1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									
PROCESSES AND PROPERTIES INDEX																			
<p>Preparing alcohols and acids from waste water of sugar manufacture. A. Zhidkov, Yu. Zhvirblyanskii and B. Gerasimov. Russ. 32,492, Oct. 31, 1953. "The water is concd., neutralized with $\text{Ca}(\text{OH})_2$ and heated to 140-150° in an autoclave. The vapors discharged from the autoclave are passed through a rectifying column for the separation of CH_3OH, while from the residue after decoupling with H_2SO_4, AcOH is distd. off at atm. pressure and lactic acid is recovered.</p>																			
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>																			
1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									

Continuous crystallization of second-boiling mass. Subject under conditions of artificial cooling. Yu. M. Zhvilyanskii. *Sakhar* 10, No. 4, 7-11 (1933); *CHIMIE indigée* 43, 687. — Continuous crystn. is effected by passing the product successively over a series of connected crystallizer-kneaders. The mameucite is cooled to 30-5° by means of water passing countercurrent through the system. It is then rapidly heated to 45-60° in a special heater by means of hot water or steam. This system considerably reduces the loss of sugar in the molasses and accelerates centrifuging. A. Papineau-Couture.

A. Papineau-Couture

100 AND 1000 ELEMENTS		PROCESSING AND PROPERTIES INDEX	
<p>CA</p> <p>Prothing substance for fire fighting. Yu. M. Zhvir- blyanin, U.S.S.R. 45,820, Feb. 24, 1940. Repressed sugar-beet cake is washed free of sugar, placed in an autoclave, and steamed under conditions accepted for the production of pectin paste. Air is blown through the paste, and the foam formed is decanted, broken, and evapd. until it contains 30-40% of dry matter. M. Hovch</p>		24	
<p>ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION</p>			
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1ST AND 2ND CHOICES		PROCESSES AND PROPERTIES INDEX																																																																																																									
C17	65,621, Feb. 28, 1966. A froth-forming substance for fighting burning liquids is obtained by hydrolyzing pectin-contg. substances. The hydrolysis is carried out in an autoclave in the presence of alkalis at 175-85° for 1-3 hrs. Pectin paste and expressed sugar-beet cake can be used as starting material. A soln. of KOH, NaOH, CaO, Na ₂ CO ₃ , or the like can be used as alkalis. To increase the foaming capacity of this product, surface-active substances may be added to it.	U.S.S.R.	27																																																																																																								
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1ST AND 2ND ORDERS		PROCESSING AND PROPERTY INDEX		1ST AND 2ND ORDERS	
<p>21</p> <p>A study of sugar-factory molasses. Yu. M. Zhvir- blyanskii and N. Troitskii. <i>Sakharnaya Prom.</i> 19, No. 4/6, 9-14(1946).—Chem. and phys.-chem. properties of edible molasses taken from various factories and from the same factory at various times were studied. The yield of molasses varies widely, depending on the soil and climatic conditions, length and conditions of storing the beets, and technological practices of juice extr., crystn., and clarification. An increased yield of molasses is in- duced by an increased content of nonsugars including nitrogenous substances, an increased content of Ca salts, and a lower $K_2O + Na_2O$ content. High-grade molasses is characterized by a high ratio of $K_2O + Na_2O$ to CaO in the ash and a lower content of org. nonsugars. The true relation between combined sugar and nonsugar is best re- flected in the nature of the exhausted molasses.</p> <p>At. Hirsch</p>		<p>28</p>		<p>28</p>	
<p>A B S L A METALLURGICAL LITERATURE CLASSIFICATION</p>					
<p>1ST AND 2ND ORDERS</p>					

100 AND 2ND ORDERS										100 AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<div style="float: left; width: 10%; font-size: 2em;">CA</div> <div style="float: right; width: 10%; text-align: right;">28</div> <div style="clear: both;"></div> <p>Crystallisation of mannosulite from the second sirup. Ya. M. Zhviribyanaki. U.S.S.R. 68,132, Apr. 30, 1947. The second mannosulite is divided into 2 parts the larger of which is crystd. as usual, while the smaller one is com- bined with the molasses from the larger part after in- creasing its d. to 88° and the mixt. is subjected to crystn. At 110°.</p>																			
AS 1-5-5-A METALLURGICAL LITERATURE CLASSIFICATION																			
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100 AND 2ND ORDERS										100 AND 4TH ORDERS									

1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH ORDERS	
A		B		C	
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CJ		CK		CL	
CM		CN		CO	
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1st and 2nd Orders

PROCESSES AND PROPERTIES INDEX

26

Exhaustion of final molasses. Yu. M. Zhvikhovskii. *Sukharnaya Prom.* 20, No. 8, 29-31 (1947).--The final massecuite can be boiled to a higher titre when its purity is high. At the discharge from the vacuum pan the massecuite is sprayed with a predet. amt. of water to prevent the formation of false grains and the massecuite in the crystallizers is dild. with preheated final molasses. The crystallizer massecuite is prepul. for purging by reheating it to the temp. at which the viscosity of the mother liquor is equal to 4000 centipoises. V. K. Raikov

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION	SUBSECTION	SECTION	SUBSECTION
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28

Coefficient of supersaturation. Yu. M. Zharitskii, A. K. Volobueva, and D. R. Abregam. *Svetlana*, Prem. 21, No. 6, 13-17 (1948).—The coeff. of supersatn. of impure sugar solns. depends upon the combination of nonsugars, purity, and temp. When purity is low the soln. increases, which means an increase in coeff. of supersatn. On the other hand with higher purities between 80 and 90, the presence of smaller amts. of nonsugars causes the soln. of sucrose to diminish to below 1.0. An increase of temp. raises the coeff. of supersatn. and vice versa. At lower temps. the time required to reach supersatn. increases.

V. E. Balkov

REF. AND IND. NO(S)		PROCESS AND PROPERTY INDEX	
28		28	
<p>Kinetics of sucrose crystallization in impure sugar solutions. <i>Yu. M. Zhuravskii, A. K. Volobueva, and D. N. Abramov. <u>Sukkarosya Press</u>, 1, 10-15 (1940).</i>—The relation of the rate of crystn. and size of the crystals can be expressed by the empirical formula: $S = Kt^m$; where S = rate of crystn., t = wt. of crystals in g., K = coeff., which characterizes the sub. meaning of the rate of crystn. in the particular expt., and m = exponent which is less than unity. Several tables, graphs, and formulas as well as description of app. are given. <i>V. B. Baikov</i></p>			
<p>ASM 31A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>SECTION 1: METALLURGY</p>		<p>SECTION 2: METALLURGY</p>	
<p>SECTION 3: METALLURGY</p>		<p>SECTION 4: METALLURGY</p>	

ZHVIRBLYANSKIY, YU., et al.

Technology

Snizheme poter' sakhara v s eklosakharnom proizvodstve (Lowering the loss of sugar in the production of beet sugar). (Moskva), Pishchepromizdat, 1951.

Monthly List of Russian Accessions. Library of Congress, November 1952. UNCLASSIFIED.

ZHIVIRBLY INSKIY, YU. M.

Laboratory investigation of the possibility of crystallizing
sugar without boiling the syrup. Yu. M. Zhivirblyanskiy,
K. K. Voklatova, and D. G. Almagul. Izv. Akad. Nauk
Sov. Sots. Rep. Kazakh. Ser. Khim. Nauk, No. 2, 1964,
46. Ref. Zh. Khim. 1965, No. 1808. Lab. tests
showed the possibility of obtaining crystalline sugar by cooling
the syrup to 40° and seeding with a highly dispersed crystal
mass.
M. Hosh

ZHVIRBYANSKI, YU. M.

Complex method of boiling massecuite of first product.
 Yu. M. Zhvirbyanski. *Sakharnaya Prom.* 27, No. 10,
 1985. To improve the quality of beet sugar and
 massecuites and to decrease consumption of steam several
 details in the art of boiling are recommended. Instead of
 dilg. white and green molasses with condensate, it should
 be reheated to 90-95° before introduction into the vacuum
 pan. Before calandria is completely covered with sirup
 at the beginning of strike, a certain amt. of steam should
 be admitted to expel condensate and preheat the heating
 surface. A small amt. of feed liquor should be introduced
 at the same time the sugar powder is injected. At the
 beginning of strike, the supersatn. of mother liquor should
 be low (1.08-1.10), and the temp. of boiling should be
 maintained at 75-78°. With decreased purity of mother
 liquor, the supersatn. can be increased to 1.10-1.12, main-
 taining the same temp. To eliminate false grains, the
 massecuite should be concd. up to 92° Brix and two con-
 secutive drinks of liquor should be admitted into the vacuum
 pan before the end of the strike. Each drink should last
 10-15 min. Theory of the complex method of boiling is
 described. V. E. Bulkov

ZHVIHEL'YANSKIY, Yu.M.

Two-boiling system with intermediate crystallization of green
syrup. Sakh.prom. 28 no.6:15-19 '54. (MIRA 7:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sakharnoy
promyshlennosti.
(Sugar industry)

ZHVIRBLYANSKIY, YU. M.

USSR/ Chemistry - Sugar-beet residue

Card 1/1 : Pub. 86 - 16/36

Authors : Zhvirblyanskiy, Yu. M., Prof.

Title : Making use of sugar-beet residue

Periodical : Priroda 43/8, 99-100, Aug 1954

Abstract : The chemical content and general characteristics of sugar-beet pulp are stated. Uses for the residue after extracting the sugar are found in industry in the form of glues, and with special treatment the residue can also be made into food for cattle.

Institution : ...

Submitted : ...

Two successive boiling systems in beet root produc-
tion with inter-rotation or utilization of greens. The All-
Union Scientific Station, Sukkarskaya Prom. 10, No. 5, 12-10
in combination with utilization of low-grade raw sugar was
tested successfully in the Gerasimov beet-sugar factory. The
green molasses from the high-grade manufacture after being
reheated to 60-65°C was mixed with low-grade sugar
and the mixture entered in the first crystallizer and cooked in
2 consecutive runs to 50-55°C. The cooked sugar was
depressed in a centrifugal separator and reheated for
beet sugar. The purity of the greens was increased by
2-3 units, and the color of the low-grade sugar decreased by
15%. Complete data of the process will be given in addi-
tional report for this process and given as well as the
scheme of operation.

V. B. Balaban

ZHVISBLYANSKIY, Yu. M., doktor tekhnicheskikh nauk, professor; GOLUBEVA, A. D.,
inzhener-tekhnolog; KOSTENKO, A. S., inzhener-tekhnolog.

Two-boiling system with intermediate crystallization of green sirup.
Trudy TSINS no.4:92-127 '56. (MLRA 10:5)
(Sugar industry)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3"

ZHVIRENAS, A. A.

ZHVIRENAS, A. A. -- "Investigation of the Operating of the Soil-Contact Gears of a Caterpillar Motor." Acad Sci Belorussian SSR, Department of Physicomathematical and Technical Sciences, Minsk, 1956. (Dissertation for the Degree of Candidate in TECHNICAL SCIENCES).

SO: KNIZHNYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

ZHVIRKO, I.S.

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Heat-power engineering in sugar mills during the forty years of the
Soviet regime. Sakh. prom. 31 no.11:30-35 N '57. (MIRA 11:1)
(Sugar industry) (Power engineering)

Zhvirko I.S.
ZHVIRKO, I.S.

Consultation. Sakh. prom. 31 no.12:67 D '57.
(Sugar industry)

(MIRA 11:1)

SHEVTSOV, D.S.; ZHVIRKO, I.S.; SHEVTSOV, L.D.

Selection and arrangement of partitions and partition units in
steam boilers. Sakh.prom. no.4:37-44 Ap '60. (MIRA 13:8)
(Boilers)

ZHVILKO, I.S.

Society of Polish Sugar Technicians is 40 years old.
Sakh.prom. 34 no.8:70-72 Ag '60. (MIRA 13:8)
(Poland—Sugar industry)